

REMARKS

Claims 1-24 and 29-32 are pending and under consideration. Claim 20 is amended herein. Claims 25-28 are cancelled herein without prejudice or disclaimer. Support for the amendments to the claims may be found in the claims as originally filed. Reconsideration is requested based on the foregoing amendment and the following remarks.

Response to Arguments:

The Applicants appreciate the consideration given to their arguments. Further reconsideration is requested.

Objections to the Claims:

Claims 1-5, 10, 14, 17, and 20-24 were objected to for various informalities. Claim 20 was amended in substantial accord with the Examiner's suggestions. The Examiner's suggestions are appreciated.

With respect to the suggestion with respect to claim 1, the Applicants do not feel that replacing "one or more" with "at least one," etc. is necessary, and would prefer to not amend the claims in that way at this time. Rather, the claims are submitted to be clear to persons skilled in the art. The courtesy of a telephone call to the undersigned representative of the Applicants is earnestly solicited, if a discussion of the merits of the claims as written would further the prosecution. In the alternative, withdrawal of the objection is earnestly solicited.

With respect to the objection to claims 4, 14, and 17, there is an explanation of the meaning of "passing control forward" in the paragraph spanning page 17, lines 19-25 and page 18, lines 1-10 of the specification. The phrase "passing control forward" appears literally at page 18, line 3. Withdrawal of the objection is earnestly solicited.

With respect to the objection to claims 10, 20, and 21, there can be a variation is a delay for a given circuit. A circuit that experiences the widest variation in delay may well exhibit the longest and the shortest delays. Lines 7-10 at page 3 of the specification, for example, discuss the variations in delay widths that are possible.

A width of a delay may, for example, vary due to factors such as temperature, driving voltage, or manufacturing dispersion. The temperature and voltage prevalent at individual locations on a chip may vary, producing attendant variations in, for example, delays. There is thus no ambiguity in the concept of a path having the longest delay time and the shortest delay

time at all. Withdrawal of the objection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 112:

Claims 4, 14, 17 and 24 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The rejection is traversed. As discussed above with respect to the objection to claims 4, 14, and 17, there is an explanation of the meaning of "passing control forward" in the paragraph spanning page 17, lines 19-25 and page 18, lines 1-10 of the specification. The phrase "passing control forward" appears literally at page 18, line 3. Withdrawal of the rejection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 112:

Claims 20, 21 and 22 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The words "third," "fourth," etc. are merely labels, and are not meant to imply a particular order, and thus the fact that there is no "first delay" or "second delay" ought not to render the claims indefinite. They are, rather, convenient means to keep the differences between otherwise similar concepts straight, and are submitted to contribute to the definiteness of claims 20, 21, and 22, not detract therefrom. The delays may just as easily have been labeled "Fred" and "Wilma," in which case no gender would have been implied. Withdrawal of the rejection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 102:

Claims 1-5, 29, and 32 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,609,237 to Hamawaki et al. (hereinafter "Hamawaki") The rejection is traversed.

Hamawaki chooses a route that connects between terminals. The number of routes chosen is limited to one, and thus the chosen route does not include either a pin having plural connection destinations or a pin connected with plural pins. Consequently, the route in Hamawaki is equivalent to a path that connects a pair of pins. The claimed invention, in contrast, is about conducting a route search of an electronic circuit in which the path connecting a pair of pins has already been chosen as in Hamawaki. Claim 1, in particular, recites:

The route satisfies the set condition.

Hamawaki neither teaches, discloses, nor suggests "the route satisfies the set condition," as recited in claim 1. In Hamawaki, rather, a height or width constraint is imposed on a routing

region through which a route passes, not the route *itself*, as described at column 1, lines 16-19.

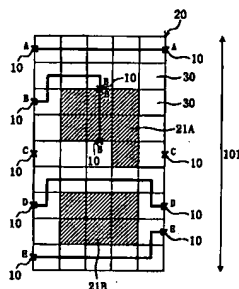
In particular, as described in Hamawaki at column 3, lines 47-53:

An object of the invention is providing a routing path finding method for an automatic routing/designing process of an LSI with the height or width constraint, imposed on a routing region, satisfied without adding any extra grid column or row in the direction in which the constraint is imposed.

Thus, Hamawaki, the routing region must satisfy the constraint, not "the route satisfies the set condition," as recited in claim 1. Also, as described at column 6, lines 24-27:

A height constraint 101 of "9", which is the maximum number of grid points in the column direction, is imposed on the routing region 20. No width constraint is imposed in the illustrated example, but that constraint may be naturally imposed.

Thus, Hamawaki, the routing region 20 must satisfy the height constraint 101, as shown in Fig. 2, not "the route satisfies the set condition," as recited in claim 1. Actually, it is clear from Fig. 2 that height constraint 101 is applied to routing *region* 20, not a route:



Since, as shown in Fig. 2, height constraint 101 of Hamawaki spans routing region 20, and applies itself thereto as a condition, Hamawaki has no "the route satisfies the set condition," as recited in claim 1. Claim 1 is submitted to be allowable. Withdrawal of the rejection of claim 1 is earnestly solicited.

Claims 2-5 depend from claim 1 and add further distinguishing elements. Claims 2-5 are thus also submitted to be allowable. Withdrawal of the rejection of claims 2-5 is also earnestly solicited.

Claims 29 and 32:

Claims 29 and 32 recite:

The route satisfies the at least one condition

Hamawaki neither teaches, discloses, nor suggests "the route satisfies the at least one condition," as discussed above with respect to the rejection of claim 1. Claims 29 and 32 are

thus submitted to be allowable for at least those reasons discussed above with respect to claim

1. Withdrawal of the rejection of claims 29 and 32 is earnestly solicited.

Allowable Subject Matter:

The Applicant acknowledges with appreciation the allowance of claims 6-9, 11, 12, 13, 16, 18, 30, and 31, and the indication that claim 10 contains allowable subject matter. Since claim 10 depends from an allowed claim, however, the objection to claim 10 as being dependent upon a rejected base claim is submitted to be incorrect, and claim 10 ought to be allowable as well.

Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all of claims 1-24 and 29-32 are allowable over the cited references.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

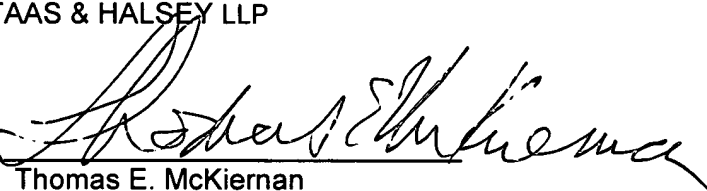
Respectfully submitted,

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